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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,187	09/25/2001	Samir S. Soliman	010107	2812

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QUALCOMM INCORPORATED
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EXAMINER	
RAMAKRISHNAIAH, MELUR	
ART UNIT	PAPER NUMBER
2614	

NOTIFICATION DATE	DELIVERY MODE
11/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/965,187	SOLIMAN, SAMIR S.	
	Examiner	Art Unit	
	Melur Ramakrishnaiah	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24,32,35 and 36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24, 32, 35-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 7, 8-11, 14, 15-19, 23, 32, 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith (WO 01/63960) in view of Shi (US PAT: 6,507,740, filed 5-18-1999) and Bonta (US2002/0077103A1).

Regarding claim 1, Raith discloses a wireless communication system comprising: a first transceiver in (12, fig. 1), a second transceiver in (12, fig. 1), a third transceiver in (20, fig. 1) in communication with the first transceiver, and a controller (not shown) configured to effectuate a handoff from the first transceiver to the second transceiver using a set of optimum parameters (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers) that are determined based on a current position of the third transceiver (20, fig. 1, page3, line 1 – page 4, line 4; figs. 1-2).

Regarding claim 8, Raith discloses a mobile unit comprising: a receiver in (20, fig. 1) configured to receive set of optimum system access parameters determined on a current position of the mobile unit (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers), a controller (not shown) to effectuate handoff from first base station (12, fig. 1) to a second base

station (like 12, fig. 1) based on the received set of optimum handoff parameters (20, fig. 1, page 3, line 1 – page 4, line 4; figs. 1-2).

Regarding claim 15, Reith discloses a base station comprising: a transmitter unit in (12, fig. 1) configured to transmit to the mobile unit (20, fig. 1) a set of optimum handoff parameters determined based on a current position of the mobile unit in a first coverage area (fig. 1) and a controller in (12, fig. 2) configured to effectuate a handoff from the first coverage area to a second coverage area based on the set of optimum handoff parameters (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers: page 7 lines 19-24; page 3 lines 3-20; page 8, lines 2-4, lines 14-15; page 9 lines 1-21)

Regarding claim 23, Reith discloses a method for effecting handoff, comprising: determining a set of optimum parameters based on the current position of the mobile unit (20, fig. 1), and effectuating a handoff from the first coverage area to a second coverage area (see fig. 1) using a set of optimum parameters (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers: page 3, line 7 – page 4, line 4; figs 1-2).

Regarding claims 32, 35, 36, Reith discloses a computer readable medium embodying a method for effectuating soft handoff, the method comprising: determining optimum parameters based on the current position of the mobile unit (20, fig. 1), and effectuating a handoff from the first coverage area to a second coverage area using the set of optimum parameters (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers: page 3, line 7 – page 4,

line 4; figs 1-2), a memory unit in (26, fig. 2) and a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP (reads on GPS 50, fig. 2) being capable of determining a current position of mobile unit in a first coverage area (page 9 lines 1-8).

Reith differs from claims 1, 8, 15, 23, 32, 35, 36 in that although he teaches that handover can be made seamless (which reads on effecting soft handoff: page 3 lines 19-20), he does not explicitly describe this as soft handoff, and optimum hand off parameters/soft hand off parameters/system hand off parameters depend upon on geographical characteristics of an area in which the third transceiver is positioned.

However, Shi discloses adaptive threshold of handoff in mobile telecommunication systems which teaches the following: In a soft or "seamless" handoff case, the mobile has two or more links with different base stations that are involved in handoff process (fig. 1, col. 1 lines 46-53), and Bonta discloses method and apparatus for system parameter assignments which teaches the following: and optimum system hand off parameters depend upon on geographical characteristics of an area in which the third transceiver is positioned (paragraphs: 0016-0017; 0025-0026; claims: 1, 4-5)

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to recognize seamless handoff as equivalent process to soft handoff as explained by Shi so that user of the mobile communication system does not experience any break in communications; optimum hand off parameters/soft hand off parameters/system hand off parameters depend upon on geographical characteristics

of an area in which the third transceiver is positioned as this arrangement would facilitate to effect hand off to the base station which provide the optimal choice for communications as taught by Bonta.

Regarding claim 7, Raith discloses a mobile unit comprising: a receiver in (12, fig. 1) configured to receive set of optimum system access parameters determined on a current position of the mobile unit (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers), a controller (not shown) configured to control mobile unit based on the received set of optimum system access-parameters (20, fig. 1, page3, line 1 – page 4, line 4; figs. 1-2).

Regarding claim 14, Reith discloses a base station comprising: a transmitter unit (12, fig. 1) configured to transmit set of optimum system-access parameters (this is implied as the reference teaches using position of mobile communicate device to optimize seamless handovers) determined based on the current position of a mobile unit (20, fig. 1), and a controller in (12, fig. 1) configured to control the mobile unit based on the set of optimum system access parameters (page 7 lines 19-24; page 3 lines 3-20; page 8, lines 2-4, lines 14-15; page 9 lines 1-21).

Raith differs from claims 7 and 14 in that although he teaches that handover can be made seamless (which reads on effecting soft handoff: page 3 lines 19-20), he does not explicitly describe this as soft handoff; optimum system access parameter depends on geographical characteristics of an area in which the mobile unit is positioned.

However, Shi discloses adaptive threshold of handoff in mobile telecommunication systems which teaches the following: In a soft or "seamless" handoff case, the mobile has two or more links with different base stations that are involved in handoff process (fig. 1, col. 1 lines 46-53) and Bonta teaches the following: optimum system access parameter depend on geographical characteristics of an area in which the mobile unit is positioned (paragraphs: 0016-0017; 0025-0026; claims: 1, 4-5).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to recognize seamless handoff as equivalent process to soft handoff as explained by Shi so that user of the mobile communication system does not experience any break in communications; optimum system access parameter depends on geographical characteristics of an area in which the mobile unit is positioned as this arrangement would facilitate to effect hand off to the base station which provide the optimal choice for communications as taught by Bonta.

Regarding claims 2-3, 9-11, 16-18, Reith further teaches the following: controller configured to determine the current position of the mobile unit (20, fig. 1), current position includes a position of cell /sector coverage area (page 9 lines 1-13)

3. Claims 4-6, 12-13, 19-22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reith in view of Shi and Bonta as applied to claims 1, 8, 15, 23 above, and further in view of Corbett et al. (US PAT: 6,934,546, hereinafter Corbett)

The combination differs from claims 4-6, 12-13, 20-22, 24 in that although it teaches the following: determining optimum system access parameters (paragraphs:

0016-0017, clams 1, 4 of '103) and it does not specifically teach: determining optimum soft handoff parameters.

However, Corbett discloses method and apparatus for control of soft handoff usage in radio communication systems which teaches the following: determining soft handoff parameters (col. 6 lines 45-54).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: determining optimum soft handoff parameters as this arrangement would facilitate to effect handoff based on soft hand off parameters, of mobile terminal between the base stations as taught by Corbett.

Response to Arguments

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CURTIS KUNTZ/
Supervisory Patent Examiner, Art Unit 2614

/Melur Ramakrishnaiah/
Primary Examiner, Art Unit 2614